**Educational Research**

**Planning, Conducting, and Evaluating Quantitative and Qualitative research**

(John Creswell)

This is a very comprehensive publication covering the practise of conducting research, the author emphasis the various steps that should be followed when conducting a research study. His emphases the initial step should always be the identification of the research question or problem. I attempted to address this issue at the focus group stage by introducing the research question first, “The purpose of this study is to explore the need for an eLearning app which will benefit students studying Electronic Technologies. The results will be used to identify and match your learning needs to the development of the app. You were selected because your course requires you to have knowledge of basic electrical principles, maths and electronics”.

With hindsight I consider introducing the research question at that stage was advantageous, as it informed the participants who the app was for and what its purpose was, the fact that it was to be designed to have a beneficial effect on their learning, helped to galvanise their commitment to answering and fully participating in the focus group. This level of commitment was important as the focus group session took nearly two hours. The bulk of my literature review concerning the question planning stage took place prior to my focus group meeting, this stage allowed me to elaborate and improve the research questions.

Within chapter 9, the author provides valuable insight on the subject of analysing and interpreting qualitative data, he discusses the following steps

1. Name the steps involved in conducting an analysis of qualitative data
2. Describe how to organise and transcribe qualitative data
3. Read through and form initial impressions of text data
4. Conduct coding of a transcript or text file
5. Develop a detailed qualitative description
6. Generate a qualitative theme
7. Create a visual image that represents your data
8. Write a paragraph describing a theme
9. Make a qualitative interpretation from your data
10. Check the accuracy of your findings and interpretation

I found some of the author’s suggestions regarding the analysis of qualitative data important but also obvious vis-à-vis my own research as I found this was a process that naturally occurred. In reflection I looked back at some of the course materials I used in the Human Sciences module of my Bachelor of Science Degree and discovered that some of the information covered was the same as this book, such as, analysing data using quantitative and qualitative methods and collecting and analysing data utilising qualitative, quantitative, or mixed methods. When the author refers to the simultaneous process of analysing while you are also collecting data, i.e. “In qualitative research, the data collection and analysis are simultaneous activities” (p 245). I recollected that I was already engaging in that process without the benefit of this book when listening to the responses from the focus group.

The author explains that the phases in the process are iterative, explaining that you continually move back and forth between data collection and analysis, again my estimation is that this advice is of great benefit to the novice, but when the student has had previous exposure to these techniques he or she may find that they automatically employ these methods.

The author includes a section on data transcription, outlining the process of converting audiotape recordings into text data. I am only starting this process but the guidelines provided to facilitate transcriptions are proving useful. A description of qualitative data analysis software programs that are available is given on page 249, and may prove useful for further data analysis.

The author gives a helpful account of how to conduct a preliminary data analysis by thoroughly exploring the data from as many different angles and perspectives as possible, by immersing yourself in the details of the interview or focus group, the researcher will glean valuable insights that are not readily apparent to the casual reader.

The author deals methodically with the subject of coding the data and describes it as the process of segmenting and labelling text to form descriptions and broad themes in the data, Figure 9.4 (p251) provides a visual model of the coding process in Qualitative Research and Figure 9.5 (p253) gives a useful insight into coding a page from a sample interview transcript.

Much of the information I concentrated on in this book dealt with conducting the research requirements of the focus group adequately, I believe I will be revisiting this book continuously over the next 8 months, as my research project unfolds as it provides much useful information on the entire practise of conducting research.

**References:**

Creswell, J, W. (2005). *Educational Research : Planning, Conducting, and Evaluating Quantitative and Qualitative research (* 3rd ed.) Upper Saddle River, N.J. : Pearson/Merrill Prentice Hall.